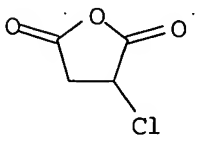
L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 1192-71-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Succinic anhydride, chloro- (7CI, 8CI)
OTHER NAMES:
CN α-Chlorosuccinic anhydride
CN **Chlorosuccinic anhydride**
FS 3D CONCORD
DR 7414-69-9
MF C4 H3 Cl O3
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)




**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

12 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
12 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 13.74 | 21.32 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | 0.00 | -0.73 |

FILE 'CAPLUS' ENTERED AT 16:06:36 ON 14 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.


FILE COVERS 1907 - 14 Jul 2005 VOL 143 ISS 3
FILE LAST UPDATED: 13 Jul 2005 (20050713/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 1192-71-8/proc
            12 1192-71-8
       3712900 PROC/RL
L6            0 1192-71-8/PROC
                  (1192-71-8 (L) PROC/RL)

=> s 1192-71-8/prep
            12 1192-71-8
       3329153 PREP/RL
L7            3 1192-71-8/PREP
                  (1192-71-8 (L) PREP/RL)

=> s 1192-71-8/pur
            12 1192-71-8
        214772 PUR/RL
L8            0 1192-71-8/PUR
                  (1192-71-8 (L) PUR/RL)

=> s l7 and aspartic acid
         64753 ASPARTIC
       4002720 ACID
         55860 ASPARTIC ACID
                  (ASPARTIC(W)ACID)
L9            0 L7 AND ASPARTIC ACID

=> s l7 1-3 ibib abs hitstr
MISSING OPERATOR L7 1-3
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> d l7 1-3 ibib abs hitstr

L7   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:          1986:590736  CAPLUS
DOCUMENT NUMBER:           105:190736
TITLE:                     Total synthesis of antitumor agent AT-125,
                           (αS,5S)-α-amino-3-chloro-4,5-dihydro-5-
                           isoxazoleacetic acid
AUTHOR(S):                 Baldwin, Jack E.; Cha, Jin K.; Kruse, Lawrence I.
CORPORATE SOURCE:          Dyson Perrins Lab., Oxford, OX1 3QY, UK
SOURCE:                    Tetrahedron (1985), 41(22), 5241-60
                           CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE:             Journal
LANGUAGE:                  English
OTHER SOURCE(S):           CASREACT 105:190736
GI
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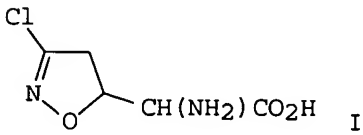



I

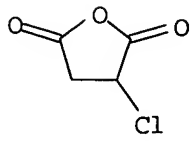
AB A short and efficient total synthesis of racemic AT-125 (erythro-I) and racemic threo-I proceeds via an intramol. Michael cyclization of HONRCOCH2CH:C(CO2R1)NHCO2CH2Ph (R = 4-MeOC6H4CH2, R1 = CH2Ph; R = R2 = H). Separation of diastereomers and deprotection to erythro-I followed by enzymic

resolution of the N-chloroacetamide with hog-kidney acylase provides (αS,5S)-I.

IT **1192-71-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation and esterification of)

RN 1192-71-8 CAPLUS

CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)



L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:557799 CAPLUS

DOCUMENT NUMBER: 99:157799

TITLE: Preparation of monomethyl fumarate

AUTHOR(S): Dymicky, Michael

CORPORATE SOURCE: East. Reg. Res. Cent., Agric. Res. Serv., Philadelphia, PA, 19118, USA

SOURCE: Organic Preparations and Procedures International (1983), 15(4), 233-8
CODEN: OPPIAK; ISSN: 0030-4948

DOCUMENT TYPE: Journal

LANGUAGE: English

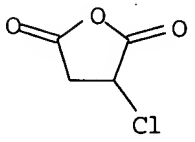
OTHER SOURCE(S): CASREACT 99:157799

AB Monomethyl maleate (I), which was prepared, was catalytically isomerized to monomethyl fumarate (II); HCl, AlCl3, and acyl chlorides were used as catalysts. Thus, fumaric acid reacted with ClCOCOCl to give maleic anhydride and chlorosuccinic anhydride, and the maleic anhydride was treated with MeOH to yield I. Mixts. of I and a catalyst were heated to 80-5° to give .apprx.82-5% II.

IT **1192-71-8P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 1192-71-8 CAPLUS

CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)



L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1972:462087 CAPLUS

DOCUMENT NUMBER: 77:62087

TITLE: Reaction of phosphorus(III) acid chlorides with conjugated heteroatomic systems

AUTHOR(S): Pudovik, A. N.; Khairullin, V. K.; Shagidullin, R. P.; Sobchuk, T. I.; Eliseenkov, V. N.; Vasyanina, M. A.

CORPORATE SOURCE: Inst. Org. Fiz. Khim. im. Arbuzova, Kazan, USSR

SOURCE: Khim. Primen. Fosfororg. Soedin., Tr. Vses. Konf., 3rd (1972), Meeting Date 1965, 220-30. Editor(s): Kabachnik, M. I. "Nauka": Moscow, USSR.

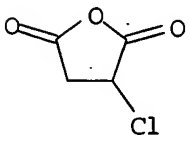
CODEN: 25HKAU
DOCUMENT TYPE: Conference
LANGUAGE: Russian

AB Heating RPCl2 (R = Et, p-MeC6H4) with R1CH:CHCO2H (R1 = H, Me) gave the corresponding RP(O) ClCHRCH2COCl in 37.0-80.5% yield; CH2:-CMeCO2H (I), HC.tplbond.CCO2H, and MeO2CCH2CO2H reacted analogously, and I also gave the corresponding cyclic anhydride. Similarly, RPClOR2 [II, R = Ph, p-MeC6H4; R2 = 1-trichloromethyl-1-cyclopentyl, CMe2CCl3, CH(CH2Cl)2] and CH2:CR1CO2H (R1 = H, Me) yielded the corresponding R2OP(O)RCH2CHR1COCl, and II (R2 = CH2CH2Cl, Et) afforded the cyclic anhydrides. These products underwent reactions characteristic of their functional groups.

IT **1192-71-8P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 1192-71-8 CAPLUS

CN 2,5-Furandione, 3-chlorodihydro- (9CI) (CA INDEX NAME)

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